MICHIGAN STATE UNIVERSITY

03/20:

Design Day and the Project Video

The Capstone Experience

Dr. Wayne Dyksen

Department of Computer Science and Engineering Michigan State University

Spring 2018



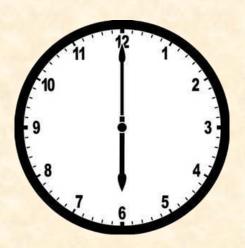
Design Day Overview

- Engineering Building
- Friday, April 27, 6:30 a.m. 2:30 p.m.
- Exhibits of Design Projects
 - From Entire College of Engineering
 - Open to the Public
 - Visitors Include
 - Faculty
 - Family and Friends
 - Corporate Sponsors
 - Middle and High School Students
- Dress is Business



Design Day Activities

- 6:00 a.m. Setup and Breakfast
- 6:45 a.m. All-Hands Photo
- 7:30 a.m. 11:45 a.m. Presentations to Judges
 - See Schedule
 - Room 3405
- 7:30 a.m. 12:30 p.m. Team Exhibits
- 12:00 p.m. Free Lunch
- 12:30 p.m. Tear Down
- 1:15 p.m. Awards Ceremony
- 2:30 p.m. Capstone Gathering
 - All-Hands
 - Families and Friends
 - Judges
 - Corporate Visitors





CSE Capstone Class, Spring 2017

Team Exhibit

- Table
- iMac(s)
 - For Software
 - For Project Video
- Other Device(s)
 - MacBook Pro
 - Tablets
 - Phones
- Poster
 - DD Booklet Page
 - Provided by Dr. D.





Families



Alumni



Middle and High School Students



Corporate Clients



Faculty



MSU Board of Trustees Member



The Media

Design Day Awards

Awards

- Auto-Owners Exposition Award
- MSUFCU Praxis Award
- TechSmith Screencast Award
- Urban Science Sigma Award
- 18 Judges
- Based On
 - Project Plan
 - Project Video
 - Design Day
 - Exposition
 - Presentation to Judges





Presenting to Judges



Presenting to Judges



Team Michigan State University Wins Urban Science Sigma Award

Project Video

- Tells Project Story
 - Your Client
 - The "Problem"
 - Your "Solution"
 - Use Case(s)
 - Avoid "Boring" Stuff
 - Account Creation
 - Login Screen
 - "Boring" Administration Details
 - Every Last Feature and Option
 - ❖ Zzz...
 - Technical Details
 - Acknowledgements
- ~6 Minutes in Length
- Professional
- Lots of Work

Don't forget.

Like Design Day Booklet.

[1 of 3]

- Story Board
 - Plan Video and Audio
 - Very Specific
- Capture Audio (Voice-Over)
 - Write Script
 - Record Using Capstone Microphones
- Capture Video
 - Screen Video or Shots
 - Photographs
 - Digital Video
 - (While Listening to Audio?)



[2 of 3]

- Edit
 - Video
 - Audio
 - Use
 - Camtasia
 - Other Software of Your Choice
- Produce
 - .mp4 (Required)
 - .mov (Optional)



Project Video How To

[3 of 3]

To Do...

- Collect Assets
 - Audio
 - Record Voice-Over
 - Background Music (If Any)
 - Video
 - Camtasia
 - Digital Video (with Capstone Camera)
 - Digital Photographs
- Import, Assemble and Edit Assets with Camtasia
 - Put All Assets in One Project Folder
 - Use (At Least) Three Tracks
 - o Video
 - Audio for Voiceover
 - Audio for Music
- Produce
 - Test Parts and Pieces in Advance
 - For Look and Feel
 - For Readability
 - Produce Entire Video
 - In Advance
 - Preview Entire Video Before Submitting



Project Video Hints

[1 of 2]

- Look at Previous Videos
 - See Archives > Websites By Semester
 - See Design Day > Awards
 - TechSmith Screencast Award
 - Urban Science Sigma Award
- Voiceover
 - TAs have two microphones you can borrow.
 - Record Mary Had a Little Lamb
 - Import into Camtasia
 - Audio Can Be Split and Moved
 - Record with Gaps of Silence
 - If Mistake, Start Over at Previous Gap
- **Background Music**
 - Make Sure Voice-Over Much Louder
 - Test in Room Settings (Like 1279 AN)
 - Always Err on Side of Too Soft Music
 - (Always a Problem with One Video)



Project Video Hints

[2 of 2]

- Reading App Text
 - Often a Problem
 - Use Very High Resolution and Pan/Zoom Feature of Camtasia
 - Test In Advance
 - In Room Setting (Like 1279 AN)
- Rendering
 - Try Samples
 - In Advance
 - Takes a Long Time
 - Do NOT Press Render Button One Hour Before Due
- Due
 - By 12 p.m. (noon) on Monday, April 23
 - Via USB3 Device to Dr. D. in Office
- Posted Immediately for Judges



Project Videos

- See Archives > Websites By Semester
- See Design Day > Awards
 - TechSmith Screencast Award
 - Urban Science Sigma Award
- Examples
 - AmazonAsa: Your Amazon Shopping Assistant
 - Ford SYNC Calendar
 - Michigan State University
 SEA: Spartan Experience App



[1 of 3]

- W09, 03/13: What's ahead?
- W09, 03/15: Intellectual Property
- W10, 03/20: Design Day and the Project Videos
- W10, 03/22: Camtasia Demo
- W11, 03/27: Ethics and Professionalism
- W11, 03/29: Team Status Reports

[2 of 3]

- W12, 04/03: Team Beta Presentations
- W12, 04/05: Team Beta Presentations
- W13, 04/10: Team Beta Presentations
- W13, 04/12: Team Beta Presentations
- W14, 04/17: Team Status Reports
- W14, 04/19: Team Status Reports

[3 of 3]

- W15, 04/24: Project Videos
- W15, 04/26: Project Videos
- W15, 04/26: Design Day Setup
- W15, 04/27: Design Day
- W16, 05/03: Project Videos